

REMARKS

Applicants thank the Examiner for a thorough search. In this response, the specification has been amended to correct typographical errors, and claims 1, 3, 12-15 and 19 have been amended. The amendments to the claims do not require a new search of the prior art as the claim amendments were made merely to use clarifying language and to incorporate the subject matter of a previously searched dependent claim (Claim 3) into the independent Claims 1 and 12-15.

Claims 1-20 are currently pending in the application. Each issue raised in the Office Action mailed November 3, 2004 is addressed hereinafter.

I. Rejection of the Claims under 35 U.S.C. § 102(e)

The Office Action rejects claims 1-20 under 35 U.S.C. § 102(e) as being anticipated by Dixon et al., U.S. No. 6,765,918 (hereinafter "*Dixon*"). The rejection is respectfully traversed.

As is known to those skilled in the art, the term "provisioning" refers to the process of creating a correct configuration for a device and delivering it to device. The claimed invention is directed to *automatically* provisioning a Customer Premises Equipment (CPE) device after receiving a service request that identifies the CPE device to be provisioned, and a service to be provided by the CPE after automatic provisioning. *Dixon* does not teach or suggest any type of CPE provisioning, much less automatic provisioning of CPE as claimed.

In *Dixon*, Multimedia Channel Banks (MCBs) "provide an edge access platform." (Col. 4, lns 3-6). MCBs serve as access devices, much like DSLAMs, and are located at

the edge of the service provider's network. Significantly, they are not on the customer's premises and cannot be considered CPE.

Furthermore, while FIG. 3 of *Dixon* shows IAD 340, which is a CPE device, the specification of *Dixon* teaches away from the claimed invention. *Dixon* provides no teaching or suggestion of how to provision IAD 340. On the contrary, in *Dixon*, someone stationed at CPE device 340 must use the MRM 330 to reach a separate application for configuration of the CPE device. (Col. 6, lns 55-57) In *Dixon*, in order to provision a CPE device, a technician or customer has to use a PC connected to the CPE device 340, and manually reach a separate management application through the MRM 330, in order to retrieve the correct configuration for the CPE device.

In the claimed invention, a device implementing the claimed process automatically determines what configuration the CPE device specified in a service request needs and delivers it to the CPE. In particular, a template appropriate for the type of CPE device identified in the request is retrieved, and resources, such as an IP address, are reserved before the configuration is delivered to the CPE device. The claimed steps are all performed automatically, and no manual intervention is needed.

There is no teaching or suggestion in *Dixon* for the specific steps required by the claimed invention because *Dixon* does not contemplate any form of automated CPE provisioning. *Dixon* teaches provisioning of CPE devices manually, much as described in the Background section of the present application. As stated in the present specification at Page 6, lines 13-15, there is a "need for a way to provide automatic provisioning for 'zero-touch' CPE devices so that little or no manual intervention is needed at the device in order to turn on services for a subscriber." *Dixon* does not teach

or suggest any type of automatic provisioning of CPE devices, much less the specific process for automating provisioning of CPE required by the claims.

Independent Claims 1, 12-15

Representative Claim 1, as amended, recites a method of automating provisioning of network services for customer premises equipment of a subscriber in a next generation digital telecommunications network that requires:

- receiving a service request from a network service provider that comprises information uniquely identifying the customer premises equipment to be provisioned and a service to be provided by the customer premises equipment;
- retrieving a configuration template for a configuration appropriate for the customer premises equipment;
- allocating and reserving at least one resource associated with the customer premises equipment;
- generating configuration data for the customer premises equipment based on the configuration template and stored system configuration information;
- delivering the configuration data over the network to the customer premises; and
- equipment to result in provisioning the customer premises equipment to provide the service.

As is well understood, “a [c]laim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d1051, 1053 (Fed. Cir. 1987) MPEP 2131. It is respectfully submitted that Claim 1 is patentable over *Dixon* because Claim 1 includes one or more limitations that are not taught or suggested by *Dixon*.

Each limitation of Claim 1 is discussed separately herein.

A. Receiving a service request from a network service provider that comprises information uniquely identifying the customer premises equipment to be provisioned and a service to be provided by the customer premises equipment

In the claimed invention, the service request identifies the customer premises equipment to be provisioned and a service to be provided by the customer premises equipment. *Dixon* does not teach or suggest this limitation.

The Office asserts that this limitation is taught by Col. 5, lns 20-36 of *Dixon*. However, this section merely states that a content provider can generate a service request. Nowhere in this section, or any other portion of *Dixon*, is it taught or suggested that the service request *comprises information uniquely identifying the customer premises equipment to be provisioned and a service to be provided by the customer premises equipment*, as required by the claims.

Customer premises equipment (CPE) is only mentioned in *Dixon* at Col. 6, lines 31-44, which teaches that an MCB hands-off IP drops that “terminate in an integrated access device (IAD), or a customer premises equipment (CPE) 340. IAD/CPE may represent ... a hub for home networks, set-top boxes or any other broadband termination point.” Terminating an IP drop in CPE does not teach or suggest the limitations of the claimed invention, and in fact has nothing to do with provisioning.

Applicants respectfully request withdrawal of the rejection under 35 USC 102(e) for at least these reasons.

B. Retrieving a configuration template for a configuration appropriate for the customer premises equipment

With respect to the step of retrieving a configuration template, the current specification at Page 29, lines 16-17 describes a Configuration Template Manager providing a template file associated with the subscribed service and variables. As further

described at Pages 41 and 42, the configuration template manager may provide a pre-defined template file for each service type, operation type and CPE type.

The Office Action asserts that Col. 6, lines 50-57, of *Dixon* teaches this limitation. However, this cited section only states that: “The MRM 330 provides a gateway element for CPE management (IAD/CPE uses the MRM 330 for proxy to separate application for configuration, alarms, etc.).” As discussed above, this section teaches away from the claimed invention as users are required to use the MRM to manually reach separate applications needed for configuration and provisioning in *Dixon*.

Furthermore, there is absolutely no mention of a configuration template of any type in this cited section, or any other portion, of *Dixon*, much less a configuration template appropriate for the customer premises equipment. A proxy is not a configuration template. Nowhere in *Dixon* is a configuration template appropriate for a CPE ever retrieved, and therefore it is respectfully submitted that *Dixon* does not teach or suggest this limitation.

Applicants respectfully request withdrawal of the rejection under 35 USC 102(e) for at least these reasons.

C. Allocating and reserving at least one resource associated with the customer premises equipment

The Office Action asserts that this limitation is taught by Cols. 4-5, lines 57-8 of *Dixon*. This cited portion of *Dixon* states: “The Multimedia Resource Manager (MRM) 112 serves as a real time signaling proxy and resource manager capable of controlling traffic attributes and user profiles of multiple MCBs 104-1 ..., 104-N and VOGs 114.” Managing attributes of MCBs and VOGs does not teach or suggest reserving resources associated with CPE, as featured by the claimed invention.

First, as discussed above, MCBs are not equivalent to CPE. With respect to VOGs, *Dixon* teaches a VOG “has a similar functionality to a TDM gateway.” A gateway, whether a Time Division Multiplex (TDM) gateway or a VOG, is a network point that acts as an entrance to another network. VOGs are also not equivalent to CPE.

As is known to those skilled in the art, Customer Premises Equipment (CPE) is telephone or other service provider equipment that is located on the customer's premises (physical location) rather than on the provider's premises or in between. This is confirmed at Col. 6, lines 36-38, of *Dixon*. MCBs and VOGs cannot read on CPE.

Second, even if the MCBs and VOGs in *Dixon* could read on CPE, controlling attributes and user profiles of MCBs and VOGs by a MRM does not teach allocating and reserving at least one resource associated with the customer premises equipment. With respect to the step of allocating and reserving at least one resource associated with the CPE, the present specification discloses at Page 24, lines 3-6 that IP addresses for voice and data are allocated and reserved as required for the requested network service. It is therefore respectfully submitted that the Claim 1 limitation of “allocating and reserving at least one resource associated with the customer premises equipment” is not taught or suggested by *Dixon*.

Applicants respectfully request withdrawal of the rejection under 35 USC 102(e) for at least these reasons.

- D. Generating configuration data for the customer premises equipment based on the configuration template and stored system configuration information
- E. Delivering the configuration data over the network to the customer premises equipment to result in provisioning the customer premises equipment to provide the service

The Office Action asserts that both of these limitations are taught by Col. 5, lns 54-56 of *Dixon*, stating that “the provisioning is provided by the Multimedia Resource Manager.” The cited section of *Dixon* states: “[t]he management and provisioning of the MCBs 104-1, ... 104-N and the VOG 114 may be implemented by the MRM 112.”

Nothing in this cited portion of *Dixon* teaches or suggests “generating configuration data for the customer premises equipment *based on the configuration template* and stored system configuration information” as recited by the claimed invention. As discussed above, *Dixon* never teaches a configuration template, and therefore, *Dixon* cannot possibly teach or suggest generating configuration data based on a configuration template.

Furthermore, as discussed above, MCBs and VOGs are not equivalent to CPE. Even if *Dixon* taught generating configuration data based on a configuration template for MCBs and VOGs, which it does not, it would not teach generating configuration data for customer premises equipment. The Office Action cites Col. 6, lns 19-20, Col. 7, lns 3-8 and Col. 7, lns 27-34 as teaching provisioning the customer premises equipment to provide the service. However, these cited portions of *Dixon* only teach modifying MCB resources (Col. 6, line 27), populating MCBs with telephony ports (Col. 7, lines 3-4), and configuring MCBs with high DS0 concentration ratios (Col. 7, lines 28-29). Even if these sections taught provisioning a MCB or VOG to provide a service, which it does not, this is not equivalent to provisioning customer premises equipment to provide a service, as MCBs and VOGs are not equivalent to CPE.

In addition, the Office Action does not explain how *Dixon* teaches or suggest the limitation of “delivering the configuration data over the network to the customer premises equipment.” As discussed above, “a [c]laim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d1051, 1053 (Fed. Cir. 1987) MPEP 2131. *Dixon* does not teach or suggest delivering configuration data over the network to the customer premises equipment.

Dixon does not teach or suggest generating any type of configuration data, much less generating configuration data based on a configuration template. Furthermore, *Dixon* does not teach or suggest delivering any type of data to customer premises equipment, much less configuration data based on a configuration template, to result in automatically provisioning CPE to provide a service, as required by the claimed invention.

Applicants respectfully request withdrawal of the rejection under 35 USC 102(e) for at least these reasons.

Dependent Claims 2-11, 16-20

Claims 2-11 and 16-20 depend from claims 1 and 15 respectively, and include all the limitations of the parent claims by virtue of their dependence. It is therefore respectfully submitted that Claim 2-11 and 16-20 are patentable over *Dixon* for at least the reasons set forth herein with respect to Claims 1 and 15.

Furthermore, the dependent claims recite additional limitations that independently render them patentable over the cited art. In view of the patentability of the independent

claims, only some of the dependent claims are further argued in order to expedite prosecution.

Claims 3 and 19

The Office Action rejects claim 3 and 19 under 35 U.S.C. § 102(e) as being anticipated by *Dixon*. Because claims 3 and 19 depend directly on claims 1 and 15, respectively, these dependent claims include each and every feature of claims 1 and 15 identified above to distinguish *Dixon*. Therefore these dependent claims are patentable over *Dixon* for at least the same reasons set forth above.

Furthermore, with respect to Claims 3 and 19, the Office Action states that *Dixon* discloses the additional limitations required by these claims at Col. 4-5 lines 57-8 and Col. 6 lines 19-30. The cited sections of *Dixon* do not disclose the additional limitations of Claims 3 and 19. These claims require that the service request comprises information uniquely identifying the customer premises equipment, information identifying one or more permanent virtual circuits assigned by the service provider to the customer premises equipment and access data.

The only teaching in *Dixon* that even vaguely relates to “information identifying one or more permanent virtual circuits assigned by the service provider to the customer premises equipment” required by Claims 3 and 19 is that the “MRM controls on-demand adaptation profiles of IP traffic flows to ATM virtual circuits (VCs)” (Col. 5, lns 5-6). This cited section, however, merely states that the MRM can control IP traffic flow to ATM virtual circuits. This in no way teaches or suggests “information identifying one or more permanent virtual circuits assigned by the service provider to the customer premises equipment”, as featured in Claims 3 and 19. Furthermore, as discussed above, the cited

sections of *Dixon* in no way teach or suggest "information uniquely identifying the customer premises equipment" in any context, much less in a service request, as required by Claims 3 and 19.

Withdrawal of the rejection of Claims 3 and 19 is respectfully requested on at least this basis.

II. Conclusion

In view of the forgoing remarks, Applicants respectfully submit that the allowance of the pending claims 1-20 is appropriate and such action is earnestly solicited.

The Examiner is invited to telephone the undersigned at (408) 414-1080 to discuss any issue that may advance prosecution.

No fee is believed to be due specifically in connection with this Response. To the extent necessary, the Commissioner is authorized to charge any fee that may be due in connection with this reply to our Deposit Account No. 50-1302.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP



Lesley Coulson Boveri
Reg. No. 46,642

Dated: January 18, 2005

2055 Gateway Place, Suite 550
San Jose, California 95110-1089
Telephone No.: (408) 414-1080 x210
Facsimile No.: (408) 414-1076

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January 18, 2005
(Date)

by


Judy Paradossi